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Post-print of Nursing Research on Quality Nursing Care in Outpatient Phlebotomy Rooms

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Date: 2022-09-06T00:00:00+00:00

Abstract

Objective: To analyze the improvement effects of high-quality nursing on the quality of outpatient blood collection work and nursing care. **Methods:** A total of 130 patients who received blood collection in the phlebotomy room of our hospital from May 2020 to May 2022 were selected as study subjects. Using the random number table method, they were divided into an observation group (65 cases) and a control group (65 cases), which received high-quality nursing and routine nursing respectively. The application effects of the two nursing models were compared. **Results:** The blood collection success rate in the observation group (98.5%) was significantly higher than that in the control group (89.2%). The sample qualification rate (96.9%) was significantly higher than that in the control group (87.7%). The incidence of nurse-patient disputes (0) was significantly lower than that in the control group (6.2%). The degree of puncture pain was lower than that in the control group, and all nursing satisfaction scores were higher than those in the control group. Inter-group comparisons of the above indicators showed statistically significant differences ($P < 0.05$). **Conclusion:** The application of high-quality nursing services in outpatient phlebotomy rooms helps improve blood collection success rates and sample qualification rates, reduce nurse-patient disputes, alleviate patients' puncture pain, and enhance their nursing satisfaction. This nursing approach is suitable for promotion and application in clinical practice.

Full Text

Preamble

Title: Quality Nursing Work in Outpatient Blood Draw Rooms: A Nursing Research Study

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This is a preprint published on NursRxiv (not peer-reviewed)

Abstract

Objective: To analyze the effect of high-quality nursing on improving outpatient blood collection work quality and nursing care quality.

Methods: Patients who received blood collection in the hospital's blood collection room from May to May were selected as study subjects. Using a random number table method, they were divided into an observation group (cases) and a control group (cases), receiving quality nursing care and routine nursing care respectively. The application effects of the two nursing models were compared.

Results: The blood collection success rate in the observation group (%) was significantly higher than that in the control group (%); the sample qualification rate (%) was significantly higher than that in the control group (%); the incidence of nurse-patient disputes (%) was significantly lower than that in the control group (%); the degree of puncture pain was lower than that in the control group; and various nursing satisfaction scores were higher than those in the control group. All inter-group comparisons showed statistically significant differences ($P < .05$).

Conclusion: Applying high-quality nursing services in outpatient blood collection rooms helps improve blood collection success rates and sample qualification rates, reduces nurse-patient disputes, alleviates patients' puncture pain, and enhances their nursing satisfaction. This nursing method is suitable for clinical promotion and application.

Keywords: Quality Nursing; Outpatient Blood Draw Room; Nursing Research

Introduction

In recent years, with changing public attitudes, demands for nursing work have increased correspondingly. In outpatient blood draw rooms, effective nursing care can improve nurse-patient relationships and promote significant improvements in nursing quality. During daily diagnosis and treatment processes, patients' requirements for nursing care continue to rise, which has also driven the development and refinement of nursing work while endowing daily nursing with

new content and new demands. The outpatient blood draw room is an important component of hospitals with heavy nursing tasks and numerous potential hazards. It serves a large number of patients, thus requiring extremely high-quality nursing work. In clinical practice, nursing services in blood draw rooms should be highly valued to ensure blood collection work is completed smoothly through quality nursing services that genuinely serve patients. This study introduced a quality nursing model into outpatient blood collection work, and the nursing effects are described below.

Materials and Methods

Study Design and Participants

This study selected patients who received blood collection in the blood collection room from May to May as research subjects. Using the random number table method, they were divided into an observation group (cases) and a control group (cases). The observation group had an average age of () years, while the control group had an average age of () years. There were no statistically significant differences in general data between the two groups ($P>$), making them comparable.

Inclusion and Exclusion Criteria

Inclusion Criteria: (1) All patients underwent blood collection according to medical orders.

Exclusion Criteria: (1) Patients with speech, hearing, or visual functional disorders; (2) Patients with mental illnesses; (3) Patients with consciousness disorders or confusion; (4) Patients with malignant tumors; (5) Patients whose condition was too severe to complete the study; (6) Patients who had received other interventions before the study; (7) Patients with severe cardiovascular and cerebrovascular diseases; (8) Patients with severe liver and kidney function impairment or acute infection.

Interventions

Control Group: Implemented routine nursing care. Patients were informed about blood collection items, asked whether they were fasting, followed routine blood collection and hemostasis procedures, and were informed of precautions after the procedure.

Observation Group: Implemented quality nursing care with the following measures:

- (1) **Environmental Nursing:** Ensure the room is clean, tidy, well-ventilated, and brightly lit. Control temperature and relative humidity within reasonable ranges to enhance comfort. Nursing staff must maintain

aseptic operation concepts, and disposable items must be changed for each patient.

- (2) **Process Management:** Strengthen training for blood collection room nursing staff through regular training sessions focusing on improving theoretical knowledge and operational skills. Nursing staff must be proficient in blood collection procedures, blood collection room work systems, emergency handling methods, and puncture techniques. After training, unified assessments must be conducted, and only those who pass can participate in daily blood collection work. Department leaders should strengthen supervision and guidance of grassroots nursing work to timely avoid nursing risks and reduce nurse-patient disputes. All operational procedures must be standardized and scientific.
- (3) **Service Philosophy:** Provide enthusiastic service and respect patients. When receiving each patient, greet them with inquiries and comfort, and send them off with farewells to make patients feel warm. Inform patients about blood collection items, collection sites, and quantities, answer their questions patiently, and inquire whether they are fasting.
- (4) **Psychological Nursing:** Communicate more with patients to understand their psychological needs, listen actively, and help solve practical problems in a targeted manner. Provide psychological intervention for patients with negative emotions such as tension and fear, informing them of precautions and cooperation methods.
- (5) **Emergency Event Handling:** Establish emergency response plans for needle fainting incidents. Strictly implement aseptic operations to minimize infection risks.

Outcome Measures

The following indicators were observed and compared between the two groups: blood collection success rate, sample qualification rate, nurse-patient dispute incidence, puncture pain degree, and nursing satisfaction.

- (1) **Sample Qualification Criteria:** Samples without hemolysis and anti-coagulated samples without clotting were judged as “qualified.”
- (2) **Puncture Pain Assessment:** Grade 1: mild pain with good tolerance; Grade 2: obvious pain with discomfort; Grade 3: severe pain.
- (3) **Nursing Satisfaction Assessment:** A questionnaire survey method was used, including five dimensions: health education, comfort, pain relief, technical proficiency, and blood collection room environment. Each item had a full score of points, with higher scores indicating better satisfaction.

Statistical Methods

Data were analyzed using SPSS statistical software. Measurement data were expressed as ($\bar{x} \pm s$) and analyzed using t-tests; count data were expressed as rates (%) and analyzed using χ^2 tests. $P < 0.05$ was considered statistically significant.

Results

Comparison of Blood Collection Success Rate, Sample Qualification Rate, and Nurse-Patient Dispute Incidence

The blood collection success rates in the observation group and control group were % and % respectively; the sample qualification rates were % and % respectively; and the nurse-patient dispute incidences were % and % respectively. All indicators in the observation group were superior to those in the control group, with statistically significant differences between groups ($P < 0.05$).

Comparison of Puncture Pain Degree

Puncture pain grading in the observation group: cases. Puncture pain grading in the control group: cases. The puncture pain degree in the observation group was lower than that in the control group, with statistically significant differences between groups ($P < 0.05$).

Comparison of Nursing Satisfaction Between the Two Groups

All nursing satisfaction scores in the observation group were higher than those in the control group, with statistically significant differences between groups ($P < 0.05$).

Table 1: Comparison of Nursing Satisfaction Scores Between the Two Groups

Dimension	Observation Group	Control Group
Health Education		
Comfort		
Pain Relief		
Technical Proficiency		
Blood Collection Room Environment		

Note: Compared with the control group, ()

Discussion

Quality nursing is a new nursing concept with a core principle of being people-oriented and insisting on meeting patients' needs as the focus of work. The quality of nursing work in outpatient blood draw rooms directly affects patients' examinations, disease treatment, and rehabilitation, and thus should be highly valued in clinical practice with high-quality nursing interventions implemented. Quality comfortable nursing conforms to the transformation of modern nursing models, helping patients escape from painful, unpleasant, and uncomfortable disease treatment processes.

Clinical observations have found that the main problems in outpatient blood draw rooms include poor patient emotions and states while waiting, fear during blood collection, high incidence of adverse reactions after blood collection, poor nursing staff attitudes, and errors in information verification. How to solve these problems has become the focus and difficulty of nursing work. Quality nursing follows the service concept of "patient-centered," which can combine patient needs with daily nursing work and provide high-quality nursing interventions.

Applying the quality nursing model to outpatient blood collection work can provide patients with psychological counseling, health guidance, environmental nursing, emergency handling, and other multi-faceted nursing services, which can effectively improve patient blood collection success rates and sample qualification rates. This nursing method has been recognized by many patients and their families and has good clinical application value. Nurses consciously approach patients to meet their needs, increase communication between nurses and patients, and improve patient satisfaction with nursing work.

The results of this study show that applying quality nursing intervention in outpatient blood collection rooms significantly improved patient blood collection success rates and sample qualification rates, reaching % and % respectively. The nurse-patient dispute incidence rate was significantly reduced to %, patients' puncture pain degree was substantially alleviated, and nursing satisfaction was significantly improved. All these indicators were superior to those of patients receiving routine nursing care, with statistically significant differences between groups ($P < .$).

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